

IN THE CLAIMS

1. (Previously Presented) A self-energizing brake assembly comprising:
a support pivotally mounted at an angle relative to a rotatable brake member; and
a friction member pivotally mounted relative to the support and slideable along said support between engaged and disengaged positions with the rotatable brake member to generate a braking force between said friction member and the rotatable brake member, wherein said angle of said support is variable for controlling a self-energizing gain in said braking force.
2. (Previously Presented) A self-energizing brake assembly comprising:
a support pivotally mounted at an angle relative to a rotatable brake member; and
a brake pad including a wedge and a friction element pivotally mounted to said wedge, said brake pad movable along said support between engaged and disengaged positions with the rotatable brake member to generate a braking force between said brake pad and the rotatable brake member, wherein said angle of said support is variable for controlling a self-energizing gain in said braking force.
3. (Currently Amended) The assembly as recited in claim 2, wherein the support is pivotally mounted relative to the rotatable brake member at a pivot, and wherein engagement between said friction element and the rotatable brake member drives said brake pad along said support toward the pivot and the rotatable brake member to increase braking force.
4. (Previously Presented) The assembly as recited in claim 1, comprising an adjustable member biasing said support toward the rotatable brake member.
5. (Original) The assembly as recited in claim 4, wherein said adjustable member comprises a compliant member.

6. (Original) The assembly as recited in claim 4, wherein said adjustable member comprises a linear actuator.

7. (Withdrawn, Previously Presented) The assembly as recited in claim 1, comprising a release spring to bias said friction member in a direction opposing rotation of the rotatable brake member.

8. (Previously Presented) The assembly as recited in claim 1, comprising a drive actuator to apply a force to said friction member by decreasing said angle between the rotatable brake member and said support.

9-11. (Cancelled)

12. (Previously Presented) The assembly as recited in claim 1, wherein said friction member contacts an outer perimeter of the rotatable brake member.

13. (Previously Presented) The assembly as recited in claim 1, wherein said friction member contacts planar surfaces of the rotatable brake member.

14. (Previously Presented) A method of controlling braking force gain created by a self-energizing brake assembly comprising the steps of:

- a.) supporting a friction member for pivoting movement relative to a base slideable along a support, wherein the support is pivotally supported at an angle relative to a rotatable brake member; and
- b.) changing the angle of the support relative to the rotatable brake member for controlling a self-energizing gain in braking force.

15. (Previously Presented) The method as recited in claim 14, wherein said step a.) is further defined as slidably supporting the friction member at the angle relative to the rotatable brake member, and varying the angle relative to the self-energizing gain in braking force.

16. (Withdrawn, Previously Presented) The method as recited in claim 14, comprising biasing the friction member in a direction counter to rotation of the rotatable brake member.

17. (Previously Presented) The method as recited in claim 14, comprising biasing the friction member toward engagement with the rotatable brake member with an adjustable member, and moving the adjustable member in proportion to the self-energizing gain in braking force.

18. (Previously Presented) The method as recited in claim 14, wherein said step b.) comprises moving the friction member away from the rotatable brake member to maintain a desired magnitude of the self-energizing gain in braking force.

19. (Previously Presented) A self-energizing brake assembly comprising:
a support pivotally mounted at an angle relative to a rotatable brake member;
a brake pad friction element pivotally attached to a base slideable along said support between an engaged position and a disengaged position with the rotatable brake member to generate a braking force against movement of the rotatable brake member, wherein said braking force comprises an applied force and a gain component generated in excess of said applied force;
and

an actuator for varying said angle of said support for controlling said gain component of said braking force.

20. (Previously Presented) The assembly as recited in claim 19 wherein said actuator is a biasing member.

21. (Previously Presented) The assembly as recited in claim 19 wherein said actuator is a linear actuator.

22. (Previously Presented) The assembly as recited in claim 1, wherein said braking force comprises a constant applied force component and a generated gain component provided by the self-energizing brake assembly and said generated gain component is controlled by varying said angle of said support.

23. (New) The assembly as recited in claim 1 wherein said support is pivotally mounted relative to the rotatable member at a pivot, and wherein a frictional force generated between said friction member and the rotatable brake member slides said friction member along said support toward said pivot.

24. (New) The method as recited in claim 14 including supporting the support on a pivot for pivoting movement relative to the rotatable brake member, and including sliding the friction member along the support toward the pivot in response to a frictional force generated between the friction member and the rotatable brake member.

25. (New) The assembly as recited in claim 19 wherein said support is pivotally mounted relative to said rotatable brake member at a pivot, and wherein a frictional force generated between said brake pad friction element and the rotatable brake member slides said brake pad friction element along said support toward said pivot.